
Central Unit

The Central Unit shall include the following functionalities. "Number of Open Microphones Setting" supports a well-organized meeting. One, two, three or four persons can be allowed to talk at any one time to prevent the confusion that could result from several participants all speaking at once. "Speech Priority Setting Function" sets speech when Talk Keys on the conference units are activated exceeding the set number of authorized speakers, microphone ON/OFF operation can be set to any of the following: first-in-first-out, last-in-first-out, or last-in-first-out after 2nd unit (the microphone stays ON for the unit whose Talk Key was first pressed). "Auto Mic-Off Function" prevents inadvertently leaving the microphone on. With this function ON, the microphone will automatically switch itself off after a 30-second period of silence after the Talk Key was pressed. "Installation Status Checkup Function" for the at-a-glance confirmation of communication. If activated on the Central Unit, the microphone indicators in the Chairperson / Delegate Units light up. "Feedback Suppressor (FBS) Function" that locates up to seven feedback frequencies and sets notch filters to eliminate them. With the use of an optional rack mounting bracket, it can be mounted in an EIA standard equipment rack (4-unit size). The Central Unit shall provide one external microphone input (600 ohms, -60 dBV, unbalanced, phone jack), one auxiliary input (10k ohms, -20 dBV, unbalanced, phone jack), auxiliary outputs: (1) 10k ohms, -20 dBV, unbalanced, phone jack, (1)10k ohms, -10 dBV, unbalanced, RCA jack and (1) Headphone mini jack. (1) External Control Terminal (D-sub connector 9P or USB-B). The optional Infrared Transmitter/Receiver shall be connectable to the BNC jacks on the rear panel. Speech volume control adjusts the microphone volume of the Chairperson unit and Delegate Unit shall be located on the front panel. Priority chime volume control adjusts the output volume of the chime tone that sounds when the Priority Speech Key on the Central Unit is pressed which shall be located on the rear panel. Power requirement shall be 100-240 VAC, 50/60 Hz, maximum 72 W power consumption (using the provided AC Power Supply) and the operating temperature range shall be 0°C to 40°C (32°F to 104°F). The Central Unit shall weigh 2.7 kg (5.95 lbs) and be constructed of surface-treated steel plate with black metallic paint, semi-gloss finish with dimensions (W x H x D) of 361 x 122.6 x 179.8 mm (14.21" x 4.83" x 7.08").

The Central Unit shall be the TOA model TS-820.
The rack mounting bracket shall be the TOA model MB-TS920.
The Infrared Transmitter/Receiver shall be the TOA model TS-905 or TS-907.

TS-820 SYSTEM

The conference system shall be a wireless infrared conference system that can be installed and removed quickly and easily. The portable conference units shall be compact and lightweight in a pyramid shape. The system shall provide clear sound and reliable operation. The system shall be comprised of four main components: Central Unit, Infrared Transmitter / Receiver Unit, Chairperson Unit and Delegate Unit. The Chairperson and Delegate Unit shall connect via wireless infrared signal to the Central Unit using the Infrared Transmitter / Receiver Unit. The system capacity shall be a maximum combined total of 64 Chairperson / Delegate Units using a single Central Unit. The system shall be able to be controlled by external equipment via RS-232C.

Central Unit

The Central Unit shall include the following functionalities. "Number of Open Microphones Setting" supports a well-organized meeting. One, two, three or four persons can be allowed to talk at any one time to prevent the confusion that could result from several participants all speaking at once. "Speech Priority Selector Function" sets speech when Talk Keys on the conference units are activated exceeding the set number of authorized speakers, microphone ON/OFF operation can be set to any of the following: first-in-first-out, last-in-first-out, or last-in-first-out after 2nd unit (the microphone stays ON for the unit whose Talk Key was first pressed). "Auto Mic-Off Function" prevents inadvertently leaving the microphone on. With this function ON, the microphone will automatically switch itself off after a 30-second period of silence after the Talk Key was pressed. "Installation Status Checkup Function" for the at-a-glance confirmation of communication. If

activated on the Central unit, the microphone indicators in the Chairperson / Delegate Units light up. Feedback Suppressor (FBS) Function that locates up to seven feedback frequencies and sets notch filters to eliminate them. Recording Function allows to record in mp3 format and audio files can be stored to a supplied 1 GB internal memory or additional USB memory (up to 32 GB). With the use of an optional rack mounting bracket, it can be mounted in an EIA standard equipment rack (4-unit size). The Central Unit shall provide one external microphone input (600 ohms, -60 dBV, unbalanced, phone jack), one auxiliary input (10k ohms, -20 dBV, unbalanced, phone jack), auxiliary outputs: (1) 10k ohms, -20 dBV, unbalanced, phone jack, (1) 10k ohms, -10 dBV, unbalanced, RCA jack and (1) Headphone mini jack. (1) External Control Terminal (D-sub connector 9P or USB-B). The optional Infrared Transmitter/Receiver shall be connectable to the BNC jacks on the rear panel. Speech volume control adjusts the microphone volume of the Chairperson Unit and Delegate Unit shall be located on the front panel. Priority chime volume control adjusts the output volume of the chime tone that sounds when the Priority Speech Key on the Central Unit is pressed which shall be located on the rear panel. Power requirement shall be 100-240 VAC, 50/60 Hz, maximum 72 W power consumption (using the provided AC Power Supply) and the operating temperature range shall be 0°C to 40°C (32°F to 104°F). The Central Unit shall weigh 2.8 kg (6.17 lbs) and be constructed of surface-treated steel plate with black metallic paint, semi-gloss finish with dimensions (W x H x D) of 361 x 122.6 x 179.8 mm (14.21" x 4.83" x 7.08").

The Central Unit shall be the TOA model TS-820RC.
 The rack mounting bracket shall be the TOA model MB-TS920.

 TS-820RC SYSTEM

The conference system shall be a wireless infrared conference system that can be installed and removed quickly and easily. The portable conference units shall be compact and lightweight in a pyramid shape. The system shall provide clear sound and reliable operation. The system shall be capable of recording audio files (mp3 format) and these files are directly stored to a supplied 1 GB memory within the unit. An additional USB memory (up to 32 GB) slot shall be available. The system shall be comprised of four main components: Central Unit, Infrared Transmitter / Receiver Unit, Chairperson Unit and Delegate Unit. The Chairperson and Delegate Unit shall connect via wireless infrared signal to the Central Unit using the Infrared Transmitter / Receiver Unit. The system capacity shall be a maximum combined total of 64 Chairperson / Delegate Units using a single Central Unit. The system shall be able to be controlled by external equipment via RS-232C.

 Chairperson Unit

The Chairperson Unit shall feature a priority speech key, which allows it to take precedence over the Delegate Unit when speaking. The Chairperson Unit shall provide microphone-input terminal using the combined type of XLR-4-31 connector for the (optional) standard microphone or the (optional) long microphone. The Chairperson Unit shall include a monitor speaker: 8 ohm, 0.2 watt and 2 headphone Mini Jacks. The monitor speaker volume and 2 headphones output volume shall be adjustable. The Chairperson Unit shall include an LED indicator, which shall provide a speech indicator, power indicator / low battery indicator and out of communication range indicator. Built-in DIP switch on its bottom shall enable the following settings: Priority operation setting, Priority chime mute setting, and Priority speech key operation setting. The Chairperson Unit shall operate on 7.2V DC (using the optional Lithium-Ion Battery) or 9V DC (using the optional AC Power Supply). Two types of dedicated microphones shall be available as optional products: the standard type and the long type. The Chairperson Unit shall weigh 550g (1.21 lbs.) and shall be finished: Case: PC resin, black, with dimensions (W x H x D) 205.7 x 70.3 x 164.2 mm (8.10" x 2.77" x 6.46").

The Chairperson Unit shall be the TOA model TS-821.
 The standard microphone shall be the TOA model TS-923.
 The long microphone shall be the TOA model TS-924.
 The AC Power Supply shall be the TOA model AD-0910.
 The Lithium-Ion Battery shall be the TOA model BP-900A.

 Delegate Unit

The Delegate Unit shall provide microphone-input terminal using the combined type of XLR-4-31 connector for the (optional) standard microphone or the (optional) long microphone. The Delegate Unit shall include a monitor speaker: 8 ohm, 0.2 watt and 2 (two) headphone Mini Jacks. The monitor speaker volume and 2 headphones output volume shall be adjustable. The Delegate Unit shall include an LED indicator, which shall provide a speech indicator, power indicator / low battery indicator and out of communication range indicator. The Delegate Unit shall operate on 7.2V DC (using the optional Lithium-Ion Battery) or 9V DC (using the optional AC Power Supply). Two types of dedicated microphones shall be available as optional products: the standard type and the long type. The Delegate Unit shall weigh 550g (1.21 lbs.) and shall be finished: Case: PC resin, black with dimensions (W x H x D) 205.7 x 70.3 x 164.2 mm (8.10" x 2.77" x 6.46").

The Delegate Unit shall be the TOA model TS-822.
 The standard microphone shall be the TOA model TS-923.
 The long microphone shall be the TOA model TS-924.
 The AC Power Supply shall be the TOA model AD-0910.
 The Lithium-Ion Battery shall be the TOA model BP-900A.

 Central Unit

The Central Unit shall include the following functionalities. "Number of Open Microphone Setting" supports a well-organized meeting. One, two, three or four persons can be allowed to talk at any one time to prevent the confusion that could result from several participants all speaking at once. "Speech Priority Selector Function" sets speech when Talk Keys on the conference units are activated exceeding the set number of authorized speakers, microphone ON/OFF operation can be set to any of the following: first-in-first-out, last-in-first-out, or last-in-first-out after 2nd unit (the microphone stays ON for the unit whose Talk Key was first pressed). "Auto Mic-Off Function" prevents inadvertently leaving the microphone on. With this function ON, the microphone will automatically switch itself off after a 30-second period of silence after the Talk Key was pressed. "Installation Status Checkup Function" for the at-a-glance confirmation of communication. If activated on the Central Unit, the microphone indicators in the Chairperson / Delegate Units light up. "Feedback Suppressor (FBS) Function" that locates up to seven feedback frequencies and sets notch filters to eliminate them. "Recording Function" allows to record in mp3 format and audio files can be stored to a supplied 1 GB internal memory or additional USB memory (up to 32 GB). With the use of an optional rack mounting bracket, it can be mounted in an EIA standard equipment rack (4-unit size). The Central Unit shall provide two external microphone inputs (600 ohms, -60 dBV, unbalanced, phone jack), three auxiliary inputs (10k ohms, -20 dBV, unbalanced, phone jack), auxiliary outputs: (1) 10k ohms, -20 dBV, unbalanced, phone jack, (1) 10k ohms, -10 dBV, unbalanced, RCA jack and (1) Headphone mini jack. (1) External Control Terminal (D-sub connector 9P or USB-B). The optional Infrared Transmitter/Receiver shall be connectable to the BNC jacks on the rear panel. Speech volume control adjusts the microphone volume of the Chairperson unit and Delegate unit shall be located on the front panel. Priority chime volume control adjusts the output volume of the chime tone that sounds when the Priority Speech key on the Central Unit is pressed which shall be located on the rear panel. Power requirement shall be 100-240 VAC, 50/60 Hz, maximum 72 W power consumption (using the provided AC Power Supply) and the operating temperature range shall be 0°C to 40°C (32°F to 104°F). The Central Unit shall weigh 2.8 kg (6.17 lbs) and be constructed of surface-treated steel plate with black metallic paint, semi-gloss finish with dimensions (W x H x D) of 361 x 122.6 x 179.8 mm (14.21" x 4.83" x 7.08").

The Central Unit shall be the TOA model TS-920RC.
 The rack mounting bracket shall be the TOA model MB-TS920.
 The Infrared Transmitter/Receiver shall be the TOA model TS-905 or TS-907.

 TS-920RC SYSTEM

The conference system shall be a wireless infrared conference system that can be installed and

removed quickly and easily.

The portable conference units shall be compact and lightweight in a pyramid shape. The system shall provide clear sound and reliable operation. The system shall be capable of recording audio files (mp3 format) and these files are directly stored to a supplied 1 GB memory within the unit. An additional USB memory (up to 32 GB) slot shall be available. The system shall provide threefold choice vote function for instantaneous voting. The system shall be comprised of four main components: Central Unit, Infrared Transmitter / Receiver Unit, Chairperson Unit and Delegate Unit. The Chairperson and Delegate Unit shall connect via wireless Infrared signal to the Central Unit using the Infrared Transmitter / Receiver Unit. The system capacity shall be a maximum combined total of 192 Chairperson / Delegate Units using a single Central Unit. The system shall be able to be controlled by external equipment via RS-232C.

Chairperson Unit

The Chairperson Unit shall feature a priority speech key, which allows it to take precedence over the Delegate Unit when speaking. The unit shall have base language/translation language selection function. The Chairperson Unit shall provide microphone-input terminal using the combined type of XLR-4-31 connector for the (optional) standard microphone or the (optional) long microphone. The Chairperson Unit shall include a monitor speaker: 8 ohm, 0.2 watt and 2 headphone Mini Jacks. The monitor speaker volume and 2 headphones output volume shall be adjustable. The Chairperson Unit shall include an LED indicator, which shall provide a speech indicator, power indicator / low battery indicator and out of communication range indicator. Built-in DIP switch on its bottom shall enable the following settings: Priority operation setting, Priority chime mute setting, Voting activation setting, and Priority speech key operation setting. The Chairperson Unit shall operate on 7.2V DC (using the optional Lithium-Ion Battery) or 9V DC (using the optional AC Power Supply). Two types of dedicated microphones shall be available as optional products: the standard type and the long type. The Chairperson Unit shall weigh 550g (1.21 lbs.) and shall be finished: Case: PC resin, black, with dimensions (W x H x D) 205.7 x 70.3 x 164.2 mm (8.10" x 2.77" x 6.46").

- The Chairperson Unit shall be the TOA model TS-921.
- The standard microphone shall be the TOA model TS-923.
- The long microphone shall be the TOA model TS-924.
- The AC Power Supply shall be the TOA model AD-0910.
- The Lithium-Ion Battery shall be the TOA model BP-900A.

Delegate Unit

The Delegate Unit shall have base language/translation language selection function. The Delegate Unit shall provide microphone-input terminal using the combined type of XLR-4-31 connector for the (optional) standard microphone or the (optional) long microphone. The Delegate Unit shall include a monitor speaker: 8 ohm, 0.2 watt and 2 (two) headphone Mini Jacks. The monitor speaker volume and 2 headphones output volume shall be adjustable. The Delegate Unit shall include an LED indicator, which shall provide a speech indicator, power indicator / low battery indicator and out of communication range indicator. The Delegate Unit shall operate on 7.2V DC (using the optional Lithium-Ion Battery) or 9V DC (using the optional AC Power Supply). Two types of dedicated microphones shall be available as optional products: the standard type and the long type. The Delegate Unit shall weigh 550g (1.21 lbs.) and shall be finished: Case: PC resin, black, with dimensions (W x H x D) 205.7 x 70.3 x 164.2 mm (8.10" x 2.77" x 6.46").

- The Delegate Unit shall be the TOA model TS-922.
- The Microphone shall be the TOA model TS-923/924 or TS-903/904.
- The AC Power Supply shall be the TOA model AD-0910.
- The Lithium-Ion Battery shall be the TOA model BP-900A.

Standard Microphone Unit

Gooseneck microphone with red lights ring to display talk released, with two flexible sections. XLR-4-32 connector for connection to the Delegate and Chairperson Units of Infrared Conference systems: TS-820(RC)/TS-920RC.

Sensitivity:-37 dB (1 kHz, 0 dB = 1 V / PA)
Frequency response: 100 Hz - 13 kHz
Color: black, semi-gloss, paint
Length: 470 mm (1.54 ft)
Weight: 130 g (0.29 lb)

The standard microphone unit shall be the TOA model TS-923.

Long Microphone Unit

Long Gooseneck microphone for large tables etc. with red lights ring to display talk released, with two flexible sections. XLR-4-32 connector for connection to the Delegate and Chairperson Units of Infrared Conference systems TS-820(RC)/TS-920RC.

Sensitivity:-37 dB (1 kHz, 0 dB = 1 V / PA)
Frequency response: 100 Hz - 13 kHz
Color: black, semi-gloss, paint
Length: 620 mm (2.03 ft)
Weight: 150 g (0.33 lb)

The long microphone unit shall be the TOA model TS-924.